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**Exterior Scene 1 / Planning data**

Light loss factor: 0.80, ULR (Upward Light Ratio): 8.5%

Scale 1:938

**Luminaire Parts List**

No.	Pieces	Designation (Correction Factor)	$\Phi$ (Luminaire) [lm]	$\Phi$ (Lamps) [lm]	P [W]
1	192	LS-ARE1400-15de LED Arena Light 1400Watt 15de (1.000)	166773	168000	1400.0
Total:			32020401	Total: 32256000	268800.0

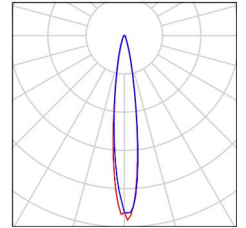


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## Exterior Scene 1 / Luminaire parts list

192 Pieces LS-ARE1400-15de LED Arena Light 1400Watt  
15de  
Article No.: LS-ARE1400-15de  
Luminous flux (Luminaire): 166773 lm  
Luminous flux (Lamps): 168000 lm  
Luminaire Wattage: 1400.0 W  
Luminaire classification according to CIE: 98  
CIE flux code: 87 95 99 98 99  
Fitting: 1 x LED - 1400.00 W (Correction Factor  
1.000).

See our luminaire  
catalog for an image of  
the luminaire.





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## Exterior Scene 1 / Luminaires (layout plan)



Scale 1 : 938

### Luminaire Parts List

No.	Pieces	Designation
1	192	LS-ARE1400-15de LED Arena Light 1400Watt 15de

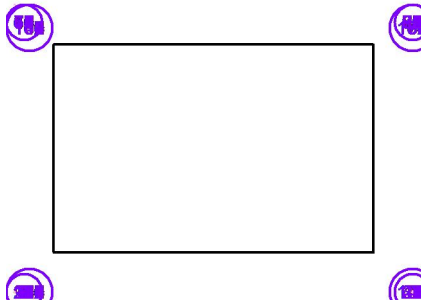


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## Exterior Scene 1 / Luminaires (coordinates list)

### LS-ARE1400-15de LED Arena Light 1400Watt 15de

166773 lm, 1400.0 W, 1 x 1 x LED - 1400.00 W (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	-13.000	-13.000	40.000	35.5	0.0	-45.8
2	-13.000	-13.000	40.000	61.7	0.0	-19.4
3	-13.000	-13.000	40.000	62.7	0.0	-25.7
4	-13.000	-13.000	40.000	64.0	0.0	-31.7
5	-13.000	-13.000	40.000	65.4	0.0	-37.0
6	-13.000	-13.000	40.000	66.8	0.0	-41.9
7	-13.000	-13.000	40.000	68.2	0.0	-46.1
8	-13.000	-13.000	40.000	69.5	0.0	-49.7
9	-13.000	-13.000	40.000	70.6	0.0	-52.7
10	-13.000	-13.000	40.000	71.6	0.0	-54.8
11	-13.000	-13.000	40.000	71.8	0.0	-58.8
12	-13.000	-13.000	40.000	61.0	0.0	-13.8
13	-13.000	-13.000	40.000	70.5	0.0	-66.8
14	-13.000	-13.000	40.000	69.9	0.0	-70.5
15	-13.000	-13.000	40.000	69.3	0.0	-75.4
16	-13.000	-13.000	40.000	72.3	0.0	-56.6
17	-13.000	-13.000	40.000	69.6	0.0	-79.6
18	-13.000	-13.000	40.000	71.1	0.0	-62.4
19	-13.000	-13.000	40.000	65.6	0.0	-77.7
20	-13.000	-13.000	40.000	48.1	0.0	-65.3
21	-13.000	-13.000	40.000	50.9	0.0	-22.8
22	-13.000	-13.000	40.000	41.4	0.0	-33.8
23	-13.000	-13.000	40.000	59.8	0.0	-73.7
24	-13.000	-13.000	40.000	60.1	0.0	-15.3
25	118.000	-13.000	40.000	35.5	0.0	45.8
26	118.000	-13.000	40.000	61.7	0.0	19.4
27	118.000	-13.000	40.000	62.7	0.0	25.7
28	118.000	-13.000	40.000	64.0	0.0	31.7



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### Exterior Scene 1 / Luminaires (coordinates list)

No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
29	118.000	-13.000	40.000	65.4	0.0	37.0
30	118.000	-13.000	40.000	66.8	0.0	41.9
31	118.000	-13.000	40.000	68.2	0.0	46.1
32	118.000	-13.000	40.000	69.5	0.0	49.7
33	118.000	-13.000	40.000	70.6	0.0	52.7
34	118.000	-13.000	40.000	71.6	0.0	54.8
35	118.000	-13.000	40.000	71.8	0.0	58.8
36	118.000	-13.000	40.000	61.0	0.0	13.8
37	118.000	-13.000	40.000	70.5	0.0	66.8
38	118.000	-13.000	40.000	69.9	0.0	70.5
39	118.000	-13.000	40.000	69.3	0.0	75.4
40	118.000	-13.000	40.000	72.3	0.0	56.6
41	118.000	-13.000	40.000	69.6	0.0	79.6
42	118.000	-13.000	40.000	71.1	0.0	62.4
43	118.000	-13.000	40.000	65.6	0.0	77.7
44	118.000	-13.000	40.000	48.1	0.0	65.3
45	118.000	-13.000	40.000	50.9	0.0	22.8
46	118.000	-13.000	40.000	41.4	0.0	33.8
47	118.000	-13.000	40.000	59.8	0.0	73.7
48	118.000	-13.000	40.000	60.1	0.0	15.3
49	-13.000	81.000	40.000	35.5	0.0	-134.2
50	-13.000	81.000	40.000	61.7	0.0	-160.6
51	-13.000	81.000	40.000	62.7	0.0	-154.3
52	-13.000	81.000	40.000	64.0	0.0	-148.3
53	-13.000	81.000	40.000	65.4	0.0	-143.0
54	-13.000	81.000	40.000	66.8	0.0	-138.1
55	-13.000	81.000	40.000	68.2	0.0	-133.9
56	-13.000	81.000	40.000	69.5	0.0	-130.3
57	-13.000	81.000	40.000	70.6	0.0	-127.3
58	-13.000	81.000	40.000	71.6	0.0	-125.2
59	-13.000	81.000	40.000	71.8	0.0	-121.2
60	-13.000	81.000	40.000	61.0	0.0	-166.2
61	-13.000	81.000	40.000	70.5	0.0	-113.2
62	-13.000	81.000	40.000	69.9	0.0	-109.5
63	-13.000	81.000	40.000	69.3	0.0	-104.6
64	-13.000	81.000	40.000	72.3	0.0	-123.4
65	-13.000	81.000	40.000	69.6	0.0	-100.4
66	-13.000	81.000	40.000	71.1	0.0	-117.6



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### Exterior Scene 1 / Luminaires (coordinates list)

No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
67	-13.000	81.000	40.000	65.6	0.0	-102.3
68	-13.000	81.000	40.000	48.1	0.0	-114.7
69	-13.000	81.000	40.000	50.9	0.0	-157.2
70	-13.000	81.000	40.000	41.4	0.0	-146.2
71	-13.000	81.000	40.000	59.8	0.0	-106.3
72	-13.000	81.000	40.000	60.1	0.0	-164.7
73	118.000	81.000	40.000	35.5	0.0	134.2
74	118.000	81.000	40.000	61.7	0.0	160.6
75	118.000	81.000	40.000	62.7	0.0	154.3
76	118.000	81.000	40.000	64.0	0.0	148.3
77	118.000	81.000	40.000	65.4	0.0	143.0
78	118.000	81.000	40.000	66.8	0.0	138.1
79	118.000	81.000	40.000	68.2	0.0	133.9
80	118.000	81.000	40.000	69.5	0.0	130.3
81	118.000	81.000	40.000	70.6	0.0	127.3
82	118.000	81.000	40.000	71.6	0.0	125.2
83	118.000	81.000	40.000	71.8	0.0	121.2
84	118.000	81.000	40.000	61.0	0.0	166.2
85	118.000	81.000	40.000	70.5	0.0	113.2
86	118.000	81.000	40.000	69.9	0.0	109.5
87	118.000	81.000	40.000	69.3	0.0	104.6
88	118.000	81.000	40.000	72.3	0.0	123.4
89	118.000	81.000	40.000	69.6	0.0	100.4
90	118.000	81.000	40.000	71.1	0.0	117.6
91	118.000	81.000	40.000	65.6	0.0	102.3
92	118.000	81.000	40.000	48.1	0.0	114.7
93	118.000	81.000	40.000	50.9	0.0	157.2
94	118.000	81.000	40.000	41.4	0.0	146.2
95	118.000	81.000	40.000	59.8	0.0	106.3
96	118.000	81.000	40.000	60.1	0.0	164.7
97	-13.000	-13.000	40.000	35.5	0.0	-45.8
98	-13.000	-13.000	40.000	61.7	0.0	-19.4
99	-13.000	-13.000	40.000	62.7	0.0	-25.7
100	-13.000	-13.000	40.000	64.0	0.0	-31.7
101	-13.000	-13.000	40.000	65.4	0.0	-37.0
102	-13.000	-13.000	40.000	66.8	0.0	-41.9
103	-13.000	-13.000	40.000	68.2	0.0	-46.1
104	-13.000	-13.000	40.000	69.5	0.0	-49.7



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### Exterior Scene 1 / Luminaires (coordinates list)

No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
105	-13.000	-13.000	40.000	70.6	0.0	-52.7
106	-13.000	-13.000	40.000	71.6	0.0	-54.8
107	-13.000	-13.000	40.000	71.8	0.0	-58.8
108	-13.000	-13.000	40.000	61.0	0.0	-13.8
109	-13.000	-13.000	40.000	70.5	0.0	-66.8
110	-13.000	-13.000	40.000	69.9	0.0	-70.5
111	-13.000	-13.000	40.000	69.3	0.0	-75.4
112	-13.000	-13.000	40.000	72.3	0.0	-56.6
113	-13.000	-13.000	40.000	69.6	0.0	-79.6
114	-13.000	-13.000	40.000	71.1	0.0	-62.4
115	-13.000	-13.000	40.000	65.6	0.0	-77.7
116	-13.000	-13.000	40.000	48.1	0.0	-65.3
117	-13.000	-13.000	40.000	50.9	0.0	-22.8
118	-13.000	-13.000	40.000	41.4	0.0	-33.8
119	-13.000	-13.000	40.000	59.8	0.0	-73.7
120	-13.000	-13.000	40.000	60.1	0.0	-15.3
121	118.000	-13.000	40.000	35.5	0.0	45.8
122	118.000	-13.000	40.000	61.7	0.0	19.4
123	118.000	-13.000	40.000	62.7	0.0	25.7
124	118.000	-13.000	40.000	64.0	0.0	31.7
125	118.000	-13.000	40.000	65.4	0.0	37.0
126	118.000	-13.000	40.000	66.8	0.0	41.9
127	118.000	-13.000	40.000	68.2	0.0	46.1
128	118.000	-13.000	40.000	69.5	0.0	49.7
129	118.000	-13.000	40.000	70.6	0.0	52.7
130	118.000	-13.000	40.000	71.6	0.0	54.8
131	118.000	-13.000	40.000	71.8	0.0	58.8
132	118.000	-13.000	40.000	61.0	0.0	13.8
133	118.000	-13.000	40.000	70.5	0.0	66.8
134	118.000	-13.000	40.000	69.9	0.0	70.5
135	118.000	-13.000	40.000	69.3	0.0	75.4
136	118.000	-13.000	40.000	72.3	0.0	56.6
137	118.000	-13.000	40.000	69.6	0.0	79.6
138	118.000	-13.000	40.000	71.1	0.0	62.4
139	118.000	-13.000	40.000	65.6	0.0	77.7
140	118.000	-13.000	40.000	48.1	0.0	65.3
141	118.000	-13.000	40.000	50.9	0.0	22.8
142	118.000	-13.000	40.000	41.4	0.0	33.8



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### Exterior Scene 1 / Luminaires (coordinates list)

No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
143	118.000	-13.000	40.000	59.8	0.0	73.7
144	118.000	-13.000	40.000	60.1	0.0	15.3
145	-13.000	81.000	40.000	35.5	0.0	-134.2
146	-13.000	81.000	40.000	61.7	0.0	-160.6
147	-13.000	81.000	40.000	62.7	0.0	-154.3
148	-13.000	81.000	40.000	64.0	0.0	-148.3
149	-13.000	81.000	40.000	65.4	0.0	-143.0
150	-13.000	81.000	40.000	66.8	0.0	-138.1
151	-13.000	81.000	40.000	68.2	0.0	-133.9
152	-13.000	81.000	40.000	69.5	0.0	-130.3
153	-13.000	81.000	40.000	70.6	0.0	-127.3
154	-13.000	81.000	40.000	71.6	0.0	-125.2
155	-13.000	81.000	40.000	71.8	0.0	-121.2
156	-13.000	81.000	40.000	61.0	0.0	-166.2
157	-13.000	81.000	40.000	70.5	0.0	-113.2
158	-13.000	81.000	40.000	69.9	0.0	-109.5
159	-13.000	81.000	40.000	69.3	0.0	-104.6
160	-13.000	81.000	40.000	72.3	0.0	-123.4
161	-13.000	81.000	40.000	69.6	0.0	-100.4
162	-13.000	81.000	40.000	71.1	0.0	-117.6
163	-13.000	81.000	40.000	65.6	0.0	-102.3
164	-13.000	81.000	40.000	48.1	0.0	-114.7
165	-13.000	81.000	40.000	50.9	0.0	-157.2
166	-13.000	81.000	40.000	41.4	0.0	-146.2
167	-13.000	81.000	40.000	59.8	0.0	-106.3
168	-13.000	81.000	40.000	60.1	0.0	-164.7
169	118.000	81.000	40.000	35.5	0.0	134.2
170	118.000	81.000	40.000	61.7	0.0	160.6
171	118.000	81.000	40.000	62.7	0.0	154.3
172	118.000	81.000	40.000	64.0	0.0	148.3
173	118.000	81.000	40.000	65.4	0.0	143.0
174	118.000	81.000	40.000	66.8	0.0	138.1
175	118.000	81.000	40.000	68.2	0.0	133.9
176	118.000	81.000	40.000	69.5	0.0	130.3
177	118.000	81.000	40.000	70.6	0.0	127.3
178	118.000	81.000	40.000	71.6	0.0	125.2
179	118.000	81.000	40.000	71.8	0.0	121.2
180	118.000	81.000	40.000	61.0	0.0	166.2





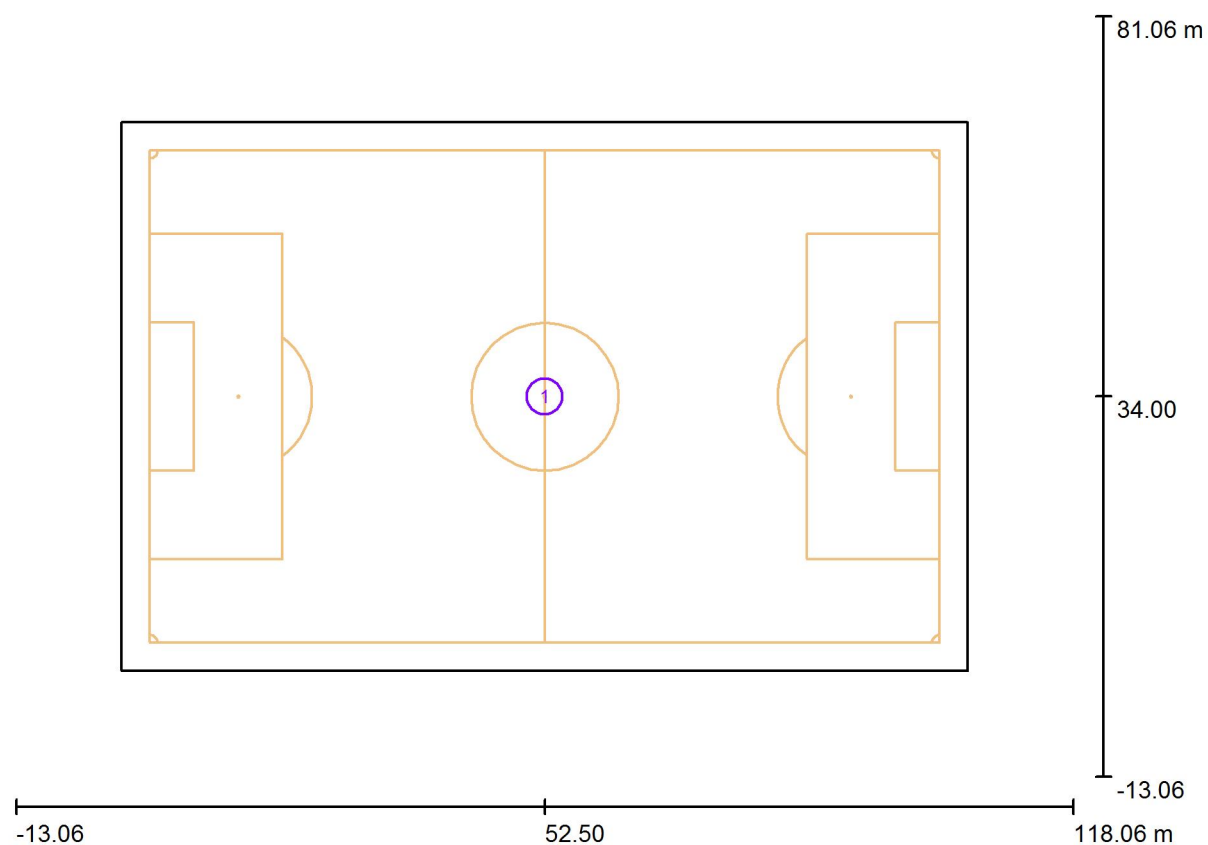
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**Exterior Scene 1 / Luminaires (coordinates list)**

No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
181	118.000	81.000	40.000	70.5	0.0	113.2
182	118.000	81.000	40.000	69.9	0.0	109.5
183	118.000	81.000	40.000	69.3	0.0	104.6
184	118.000	81.000	40.000	72.3	0.0	123.4
185	118.000	81.000	40.000	69.6	0.0	100.4
186	118.000	81.000	40.000	71.1	0.0	117.6
187	118.000	81.000	40.000	65.6	0.0	102.3
188	118.000	81.000	40.000	48.1	0.0	114.7
189	118.000	81.000	40.000	50.9	0.0	157.2
190	118.000	81.000	40.000	41.4	0.0	146.2
191	118.000	81.000	40.000	59.8	0.0	106.3
192	118.000	81.000	40.000	60.1	0.0	164.7



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**Exterior Scene 1 / Sport Sites (layout plan)**

Scale 1 : 938

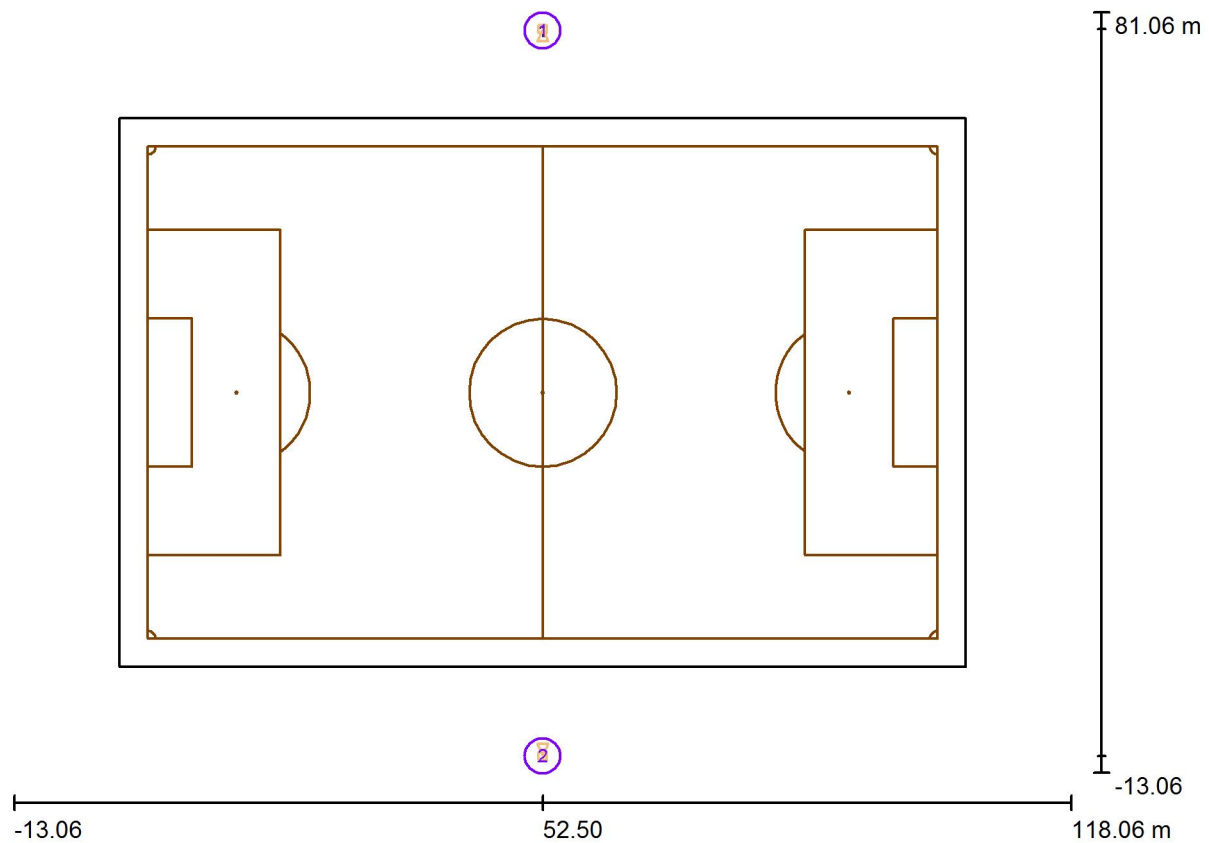
**Sport Site Parts List**

No.	Pieces	Designation
1	1	Soccer Field



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## Exterior Scene 1 / TV Cameras (Coordinates List)



Scale 1 : 938

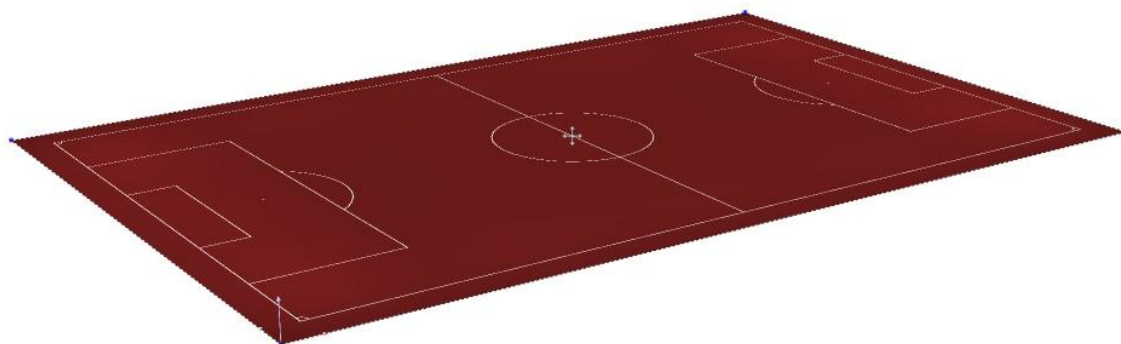
### List of the TV Cameras

No.	Designation	Position [m]		
		X	Y	Z
1	Main TV Camera	52.500	79.000	11.000
2	2nd TV Camera	52.500	-11.000	11.000



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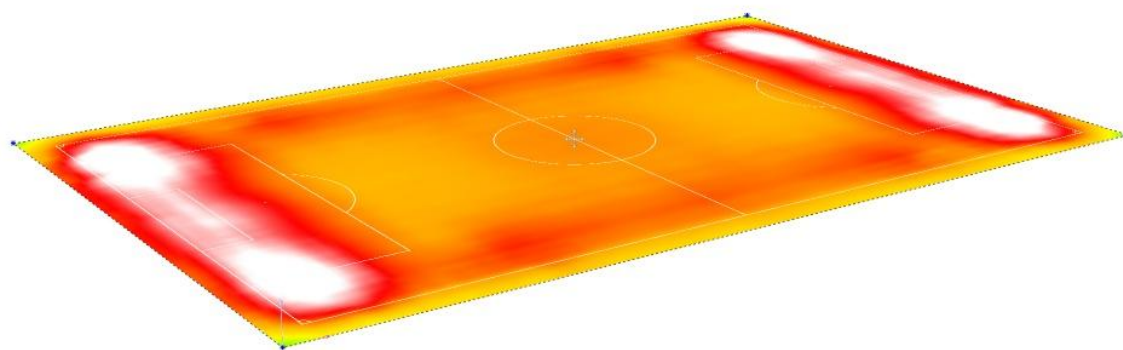
## Exterior Scene 1 / 3D Rendering





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## Exterior Scene 1 / False Color Rendering

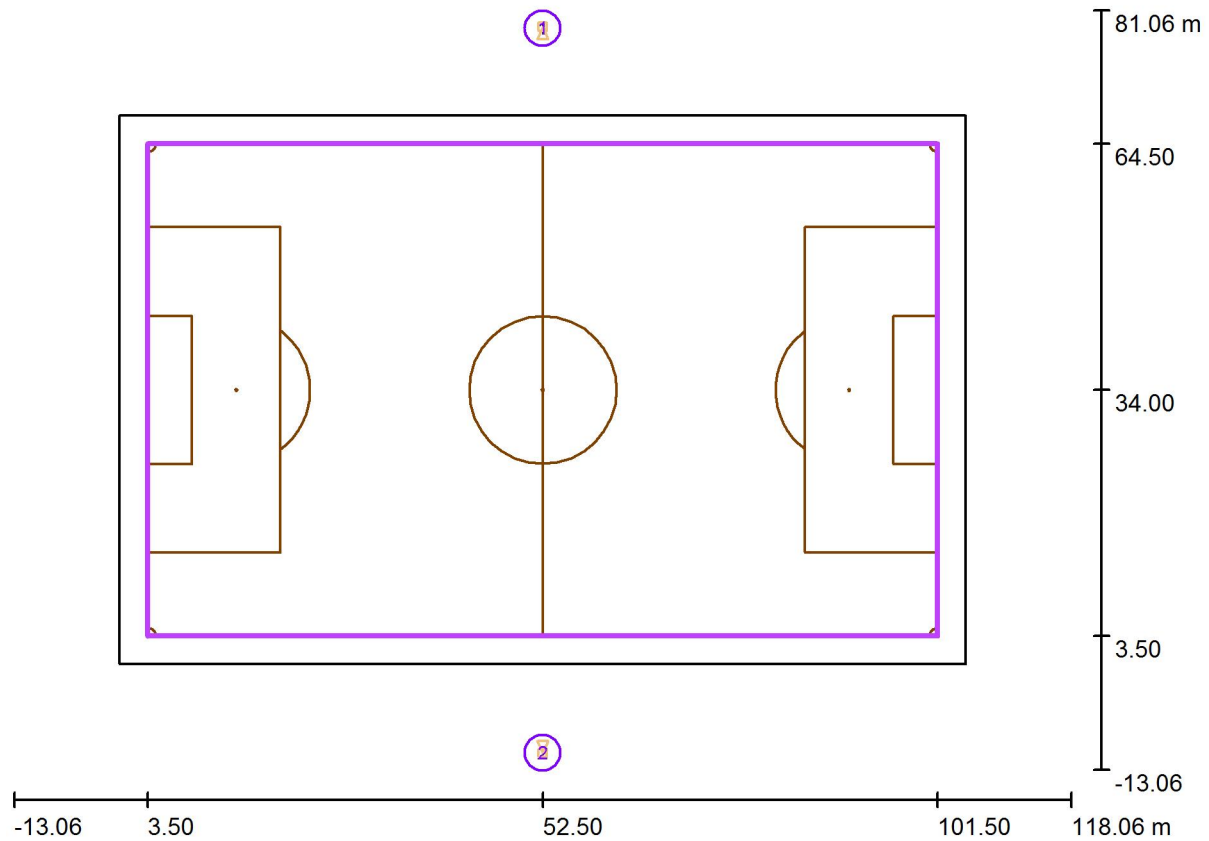


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## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Summary



Scale 1 : 938

Position: (52.500 m, 34.000 m, 0.000 m)  
Size: (98.000 m, 61.000 m)  
Rotation: (0.0°, 0.0°, 0.0°)  
Type: Normal, Grid: 19 x 11 Points  
Belongs to the following sport arena: Soccer Field 1

### Results overview

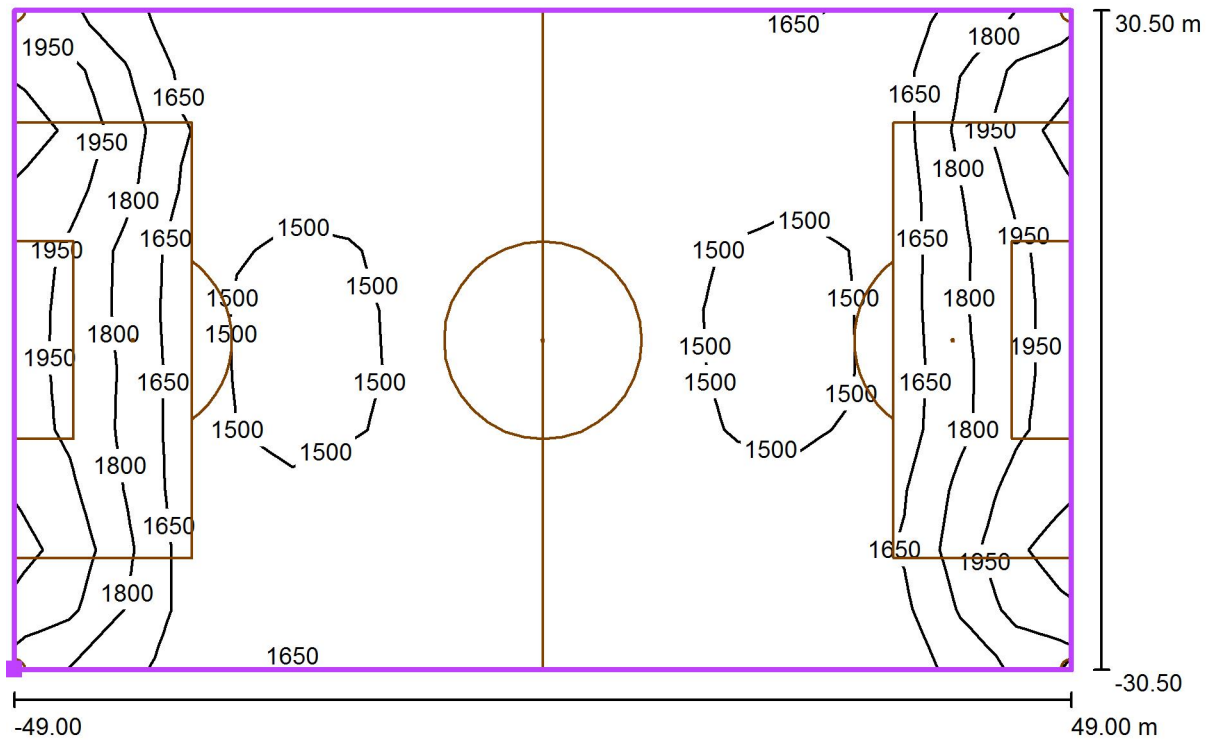
No.	Type	$E_{av}$ [lx]	$E_{min}$ [lx]	$E_{max}$ [lx]	$u0$	$E_{min} / E_{max}$	$E_h$ $m/E_m$	H [m]	Camera
1	horizontal	1650	1462	2169	0.89	0.67	/	0.000	/
2	Camera	1391	987	1879	0.71	0.53	1.19	1.000	1
3	Camera	1382	968	1871	0.70	0.52	1.19	1.000	2
4	vertical, perpendicular to sideline 1	1193	652	1682	0.55	0.39	1.38	1.000	/
5	vertical, perpendicular to sideline 2	1426	1000	1764	0.70	0.57	1.16	1.000	/
6	vertical, perpendicular to sideline 3	1190	652	1682	0.55	0.39	1.39	1.000	/
7	vertical, perpendicular to sideline 4	1426	1000	1764	0.70	0.57	1.16	1.000	/

$E_h m/E_m$  = Relationship between middle horizontal and vertical illuminance, H = Measuring Height



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## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Isolines (E, Horizontal)



Values in Lux, Scale 1 : 701

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1650

$E_{min}$  [lx]  
1462

$E_{max}$  [lx]  
2169

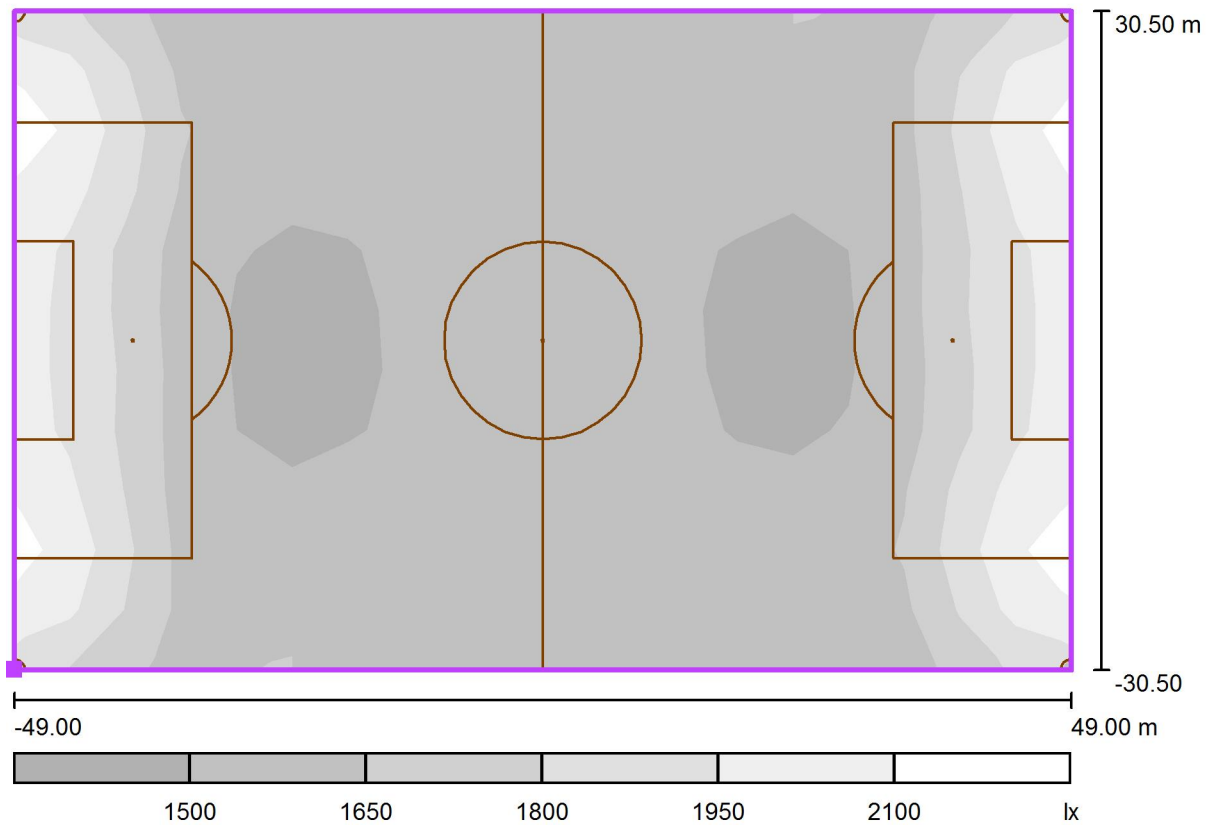
$u_0$   
0.89

$E_{min} / E_{max}$   
0.67



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## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Greyscale (E, Horizontal)



Scale 1 : 701

Position of surface in external scene:

Marked point: (3.500 m, 3.500 m, 0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1650

$E_{min}$  [lx]  
1462

$E_{max}$  [lx]  
2169

$u_0$   
0.89

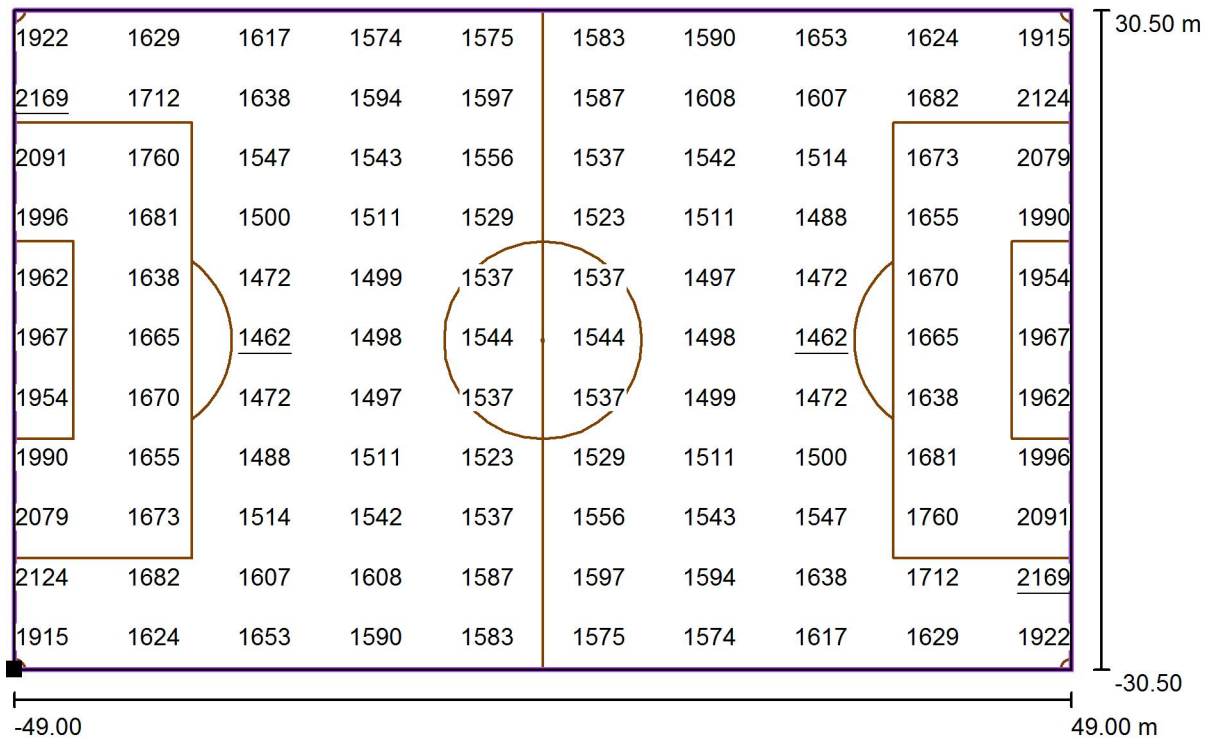
$E_{min} / E_{max}$   
0.67





Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Value Chart (E, Horizontal)



Not all calculated values could be displayed.

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1650

$E_{min}$  [lx]  
1462

$E_{max}$  [lx]  
2169

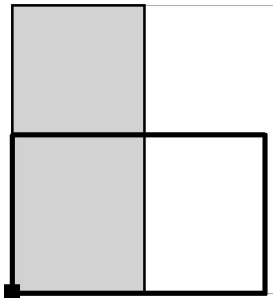
$u_0$   
0.89

$E_{min} / E_{max}$   
0.67



Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Table (E, Horizontal)



Current Selection  
 Further Selections

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



<b>58.227</b>	1922	1892	1629	1554	1617	1607	1574	1559	1575	1588
<b>52.682</b>	<u>2169</u>	2020	1712	1598	1638	1621	1594	1577	1597	1610
<b>47.136</b>	2091	2023	1760	1580	1547	1540	1543	1550	1556	1552
<b>41.591</b>	1996	1899	1681	1541	1500	1492	1511	1529	1529	1535
<b>36.045</b>	1962	1841	1638	1514	1472	1477	1499	1523	1537	1544
<b>30.500</b>	1967	1897	1665	1511	<u>1462</u>	1469	1498	1525	1544	1550
<b>24.955</b>	1954	1877	1670	1519	1472	1476	1497	1518	1537	1544
<b>19.409</b>	1990	1880	1655	1522	1488	1493	1511	1520	1523	1535
<b>13.864</b>	2079	1967	1673	1522	1514	1548	1542	1538	1537	1552
<b>8.318</b>	2124	2022	1682	1566	1607	1645	1608	1586	1587	1610
<b>2.773</b>	1915	1856	1624	1605	1653	1637	1590	1575	1583	1588
<b>m</b>	<b>2.579</b>	<b>7.737</b>	<b>12.895</b>	<b>18.053</b>	<b>23.211</b>	<b>28.368</b>	<b>33.526</b>	<b>38.684</b>	<b>43.842</b>	<b>49.000</b>

Attention: The coordinates refer to the image above. Values in Lux.

Grid: 19 x 11 Points

$E_{av}$  [lx]  
1650

$E_{min}$  [lx]  
1462

$E_{max}$  [lx]  
2169

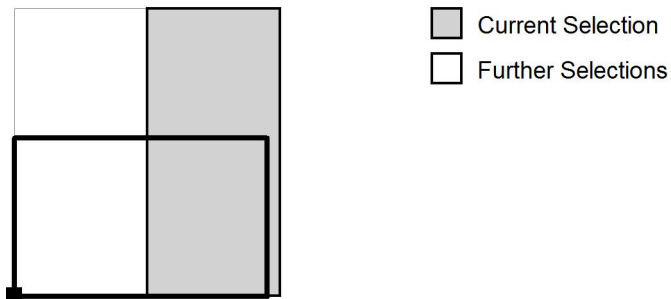
$u_0$   
0.89

$E_{min} / E_{max}$   
0.67



Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Table (E, Horizontal)



Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m, 0.000 m)



<b>58.227</b>	1583	1575	1590	1637	1653	1605	1624	1856	1915
<b>52.682</b>	1587	1586	1608	1645	1607	1566	1682	2022	2124
<b>47.136</b>	1537	1538	1542	1548	1514	1522	1673	1967	2079
<b>41.591</b>	1523	1520	1511	1493	1488	1522	1655	1880	1990
<b>36.045</b>	1537	1518	1497	1476	1472	1519	1670	1877	1954
<b>30.500</b>	1544	1525	1498	1469	<u>1462</u>	1511	1665	1897	1967
<b>24.955</b>	1537	1523	1499	1477	1472	1514	1638	1841	1962
<b>19.409</b>	1529	1529	1511	1492	1500	1541	1681	1899	1996
<b>13.864</b>	1556	1550	1543	1540	1547	1580	1760	2023	2091
<b>8.318</b>	1597	1577	1594	1621	1638	1598	1712	2020	<u>2169</u>
<b>2.773</b>	1575	1559	1574	1607	1617	1554	1629	1892	1922
<b>m</b>	<b>54.158</b>	<b>59.316</b>	<b>64.474</b>	<b>69.632</b>	<b>74.789</b>	<b>79.947</b>	<b>85.105</b>	<b>90.263</b>	<b>95.421</b>

Attention: The coordinates refer to the image above. Values in Lux.

Grid: 19 x 11 Points

$E_{av}$  [lx]  
1650

$E_{min}$  [lx]  
1462

$E_{max}$  [lx]  
2169

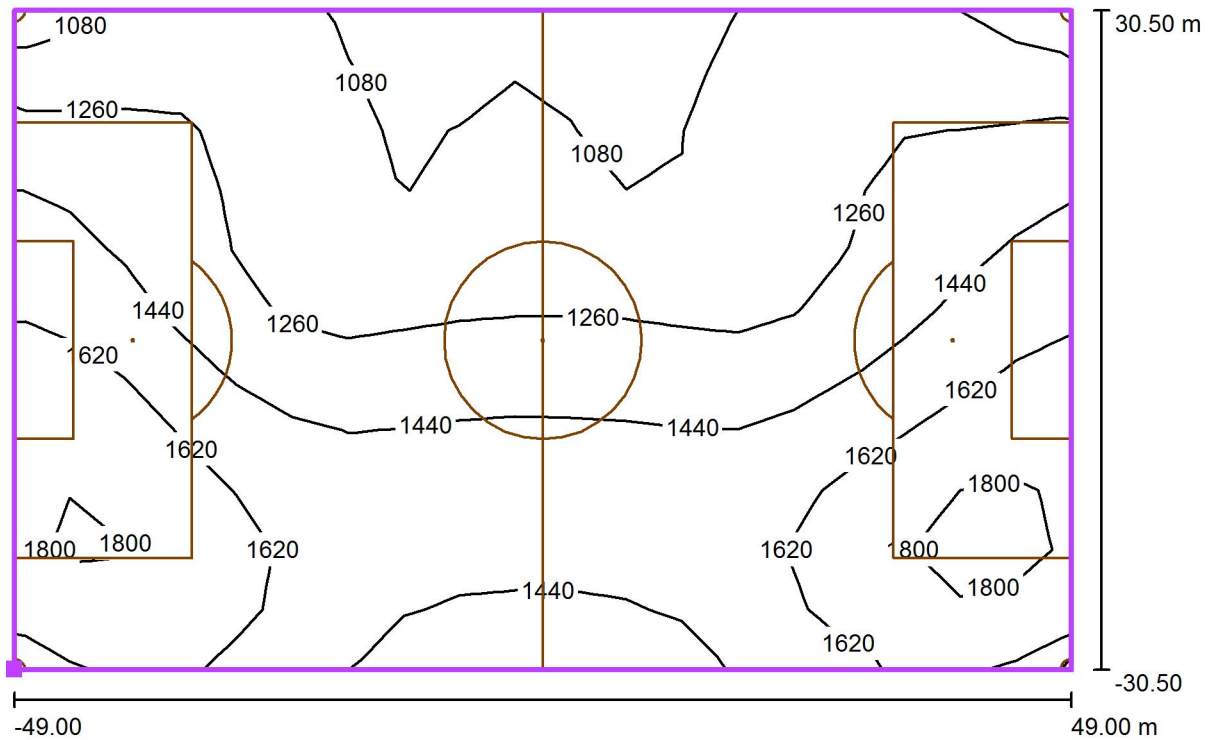
$u_0$   
0.89

$E_{min} / E_{max}$   
0.67



Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Isolines (E, Camera)



Values in Lux, Scale 1 : 701

Position of surface in external scene:

Marked point: (3.500 m, 3.500 m,  
0.000 m)

Camera Position: (52.500 m,  
79.000 m, 11.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1391

$E_{min}$  [lx]  
987

$E_{max}$  [lx]  
1879

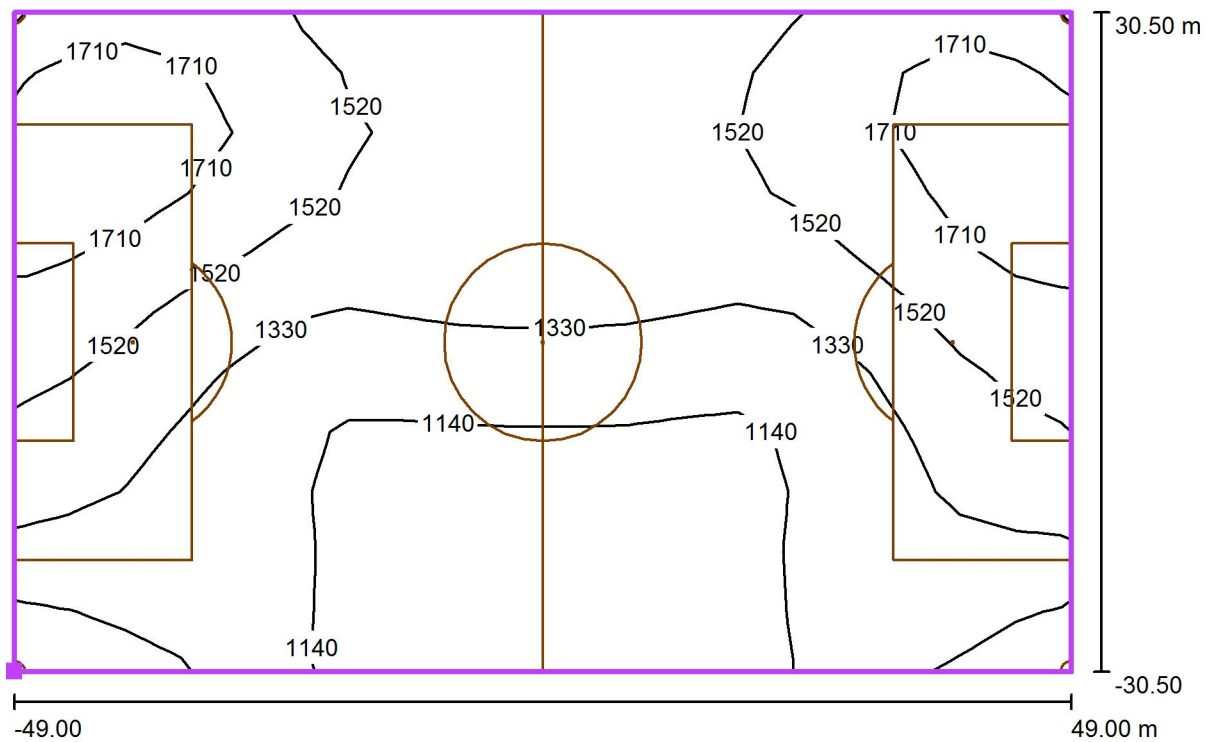
$u_0$   
0.71

$E_{min} / E_{max}$   
0.53



Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Isolines (E, Camera)



Values in Lux, Scale 1 : 701

Position of surface in external scene:

Marked point: (3.500 m, 3.500 m,  
0.000 m)

Camera Position: (52.500 m, -  
11.000 m, 11.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1382

$E_{min}$  [lx]  
968

$E_{max}$  [lx]  
1871

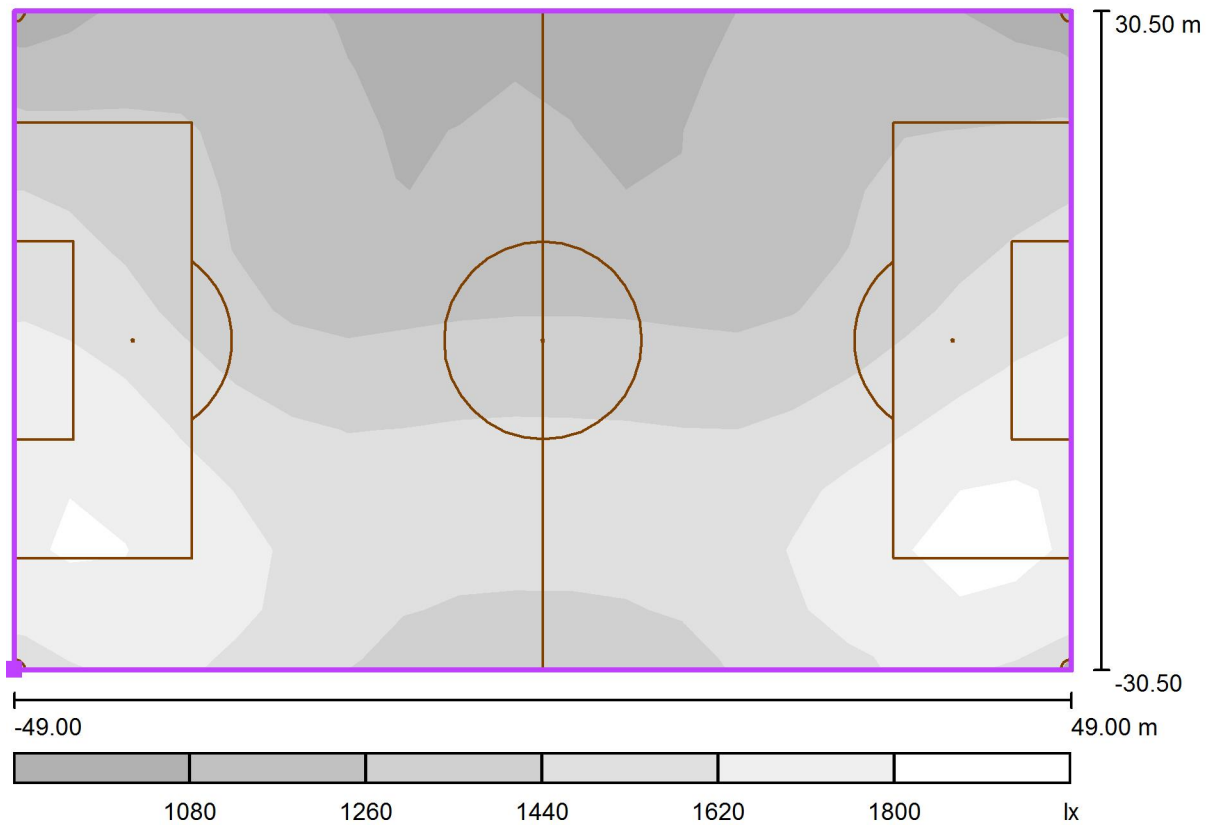
$u_0$   
0.70

$E_{min} / E_{max}$   
0.52



Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Greyscale (E, Camera)



Scale 1 : 701

Position of surface in external scene:

Marked point: (3.500 m, 3.500 m,  
0.000 m)Camera Position: (52.500 m,  
79.000 m, 11.000 m)

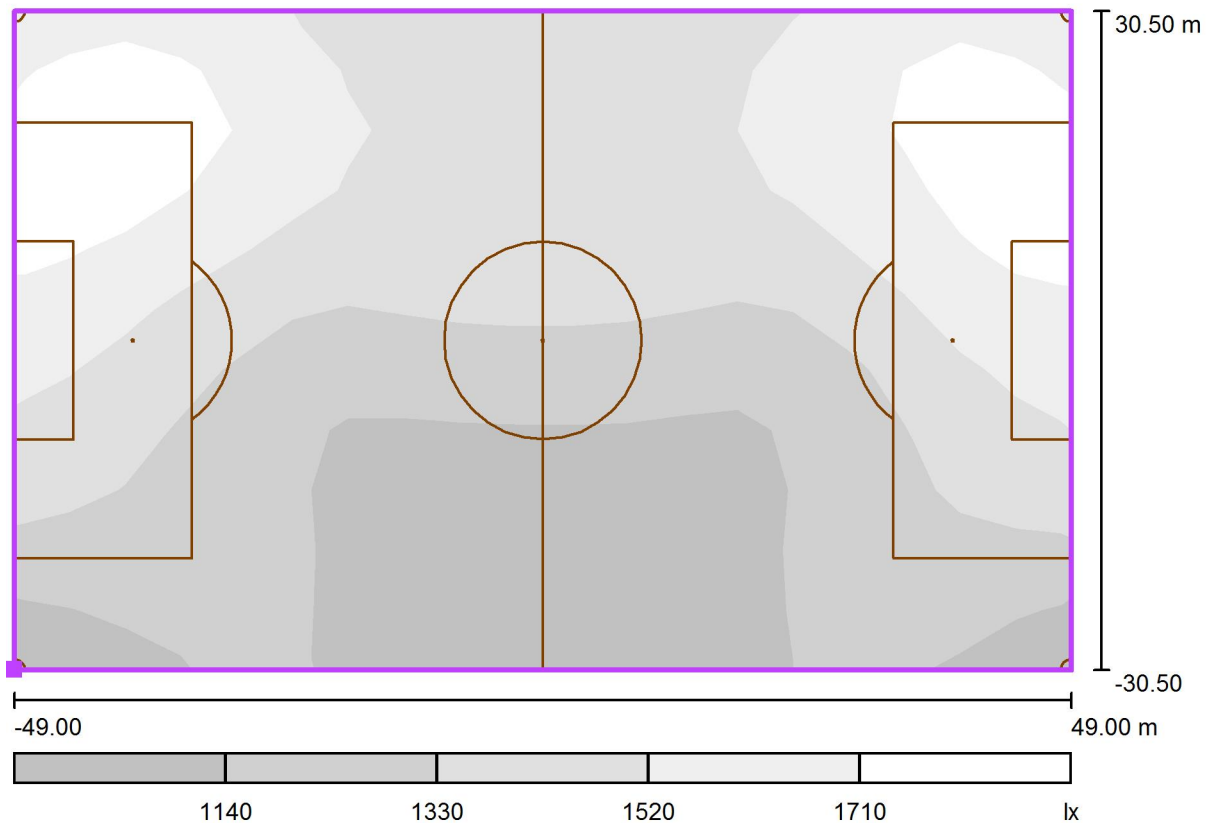
Grid: 19 x 11 Points

 $E_{av}$  [lx]  
1391 $E_{min}$  [lx]  
987 $E_{max}$  [lx]  
1879u0  
0.71 $E_{min} / E_{max}$   
0.53



Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Greyscale (E, Camera)



Scale 1 : 701

Position of surface in external scene:

Marked point: (3.500 m, 3.500 m, 0.000 m)

Camera Position: (52.500 m, -11.000 m, 11.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1382

$E_{min}$  [lx]  
968

$E_{max}$  [lx]  
1871

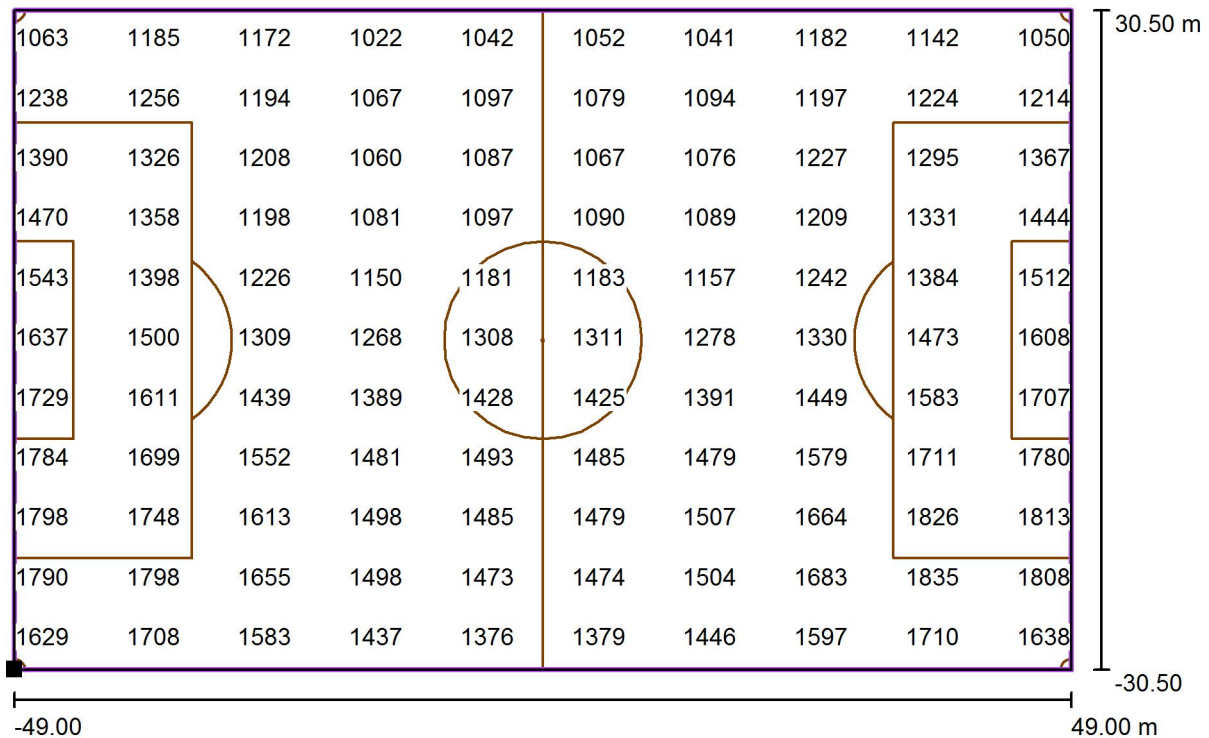
$u_0$   
0.70

$E_{min} / E_{max}$   
0.52



Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Value Chart (E, Camera)



Not all calculated values could be displayed.

Values in Lux, Scale 1 : 701

Position of surface in external scene:

Marked point: (3.500 m, 3.500 m,  
0.000 m)

Camera Position: (52.500 m,  
79.000 m, 11.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1391

$E_{min}$  [lx]  
987

$E_{max}$  [lx]  
1879

$u_0$   
0.71

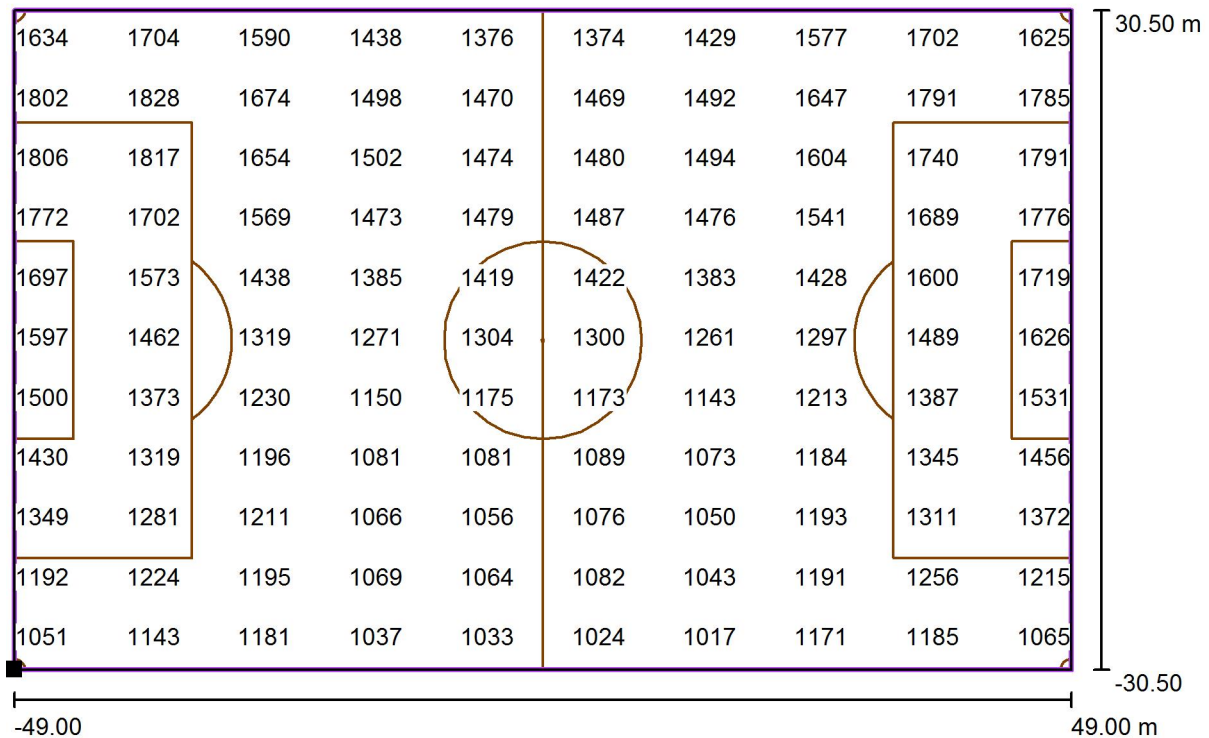
$E_{min} / E_{max}$   
0.53





Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Value Chart (E, Camera)



Not all calculated values could be displayed.

Values in Lux, Scale 1 : 701

Position of surface in external scene:

Marked point: (3.500 m, 3.500 m, 0.000 m)

Camera Position: (52.500 m, -11.000 m, 11.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1382

$E_{min}$  [lx]  
968

$E_{max}$  [lx]  
1871

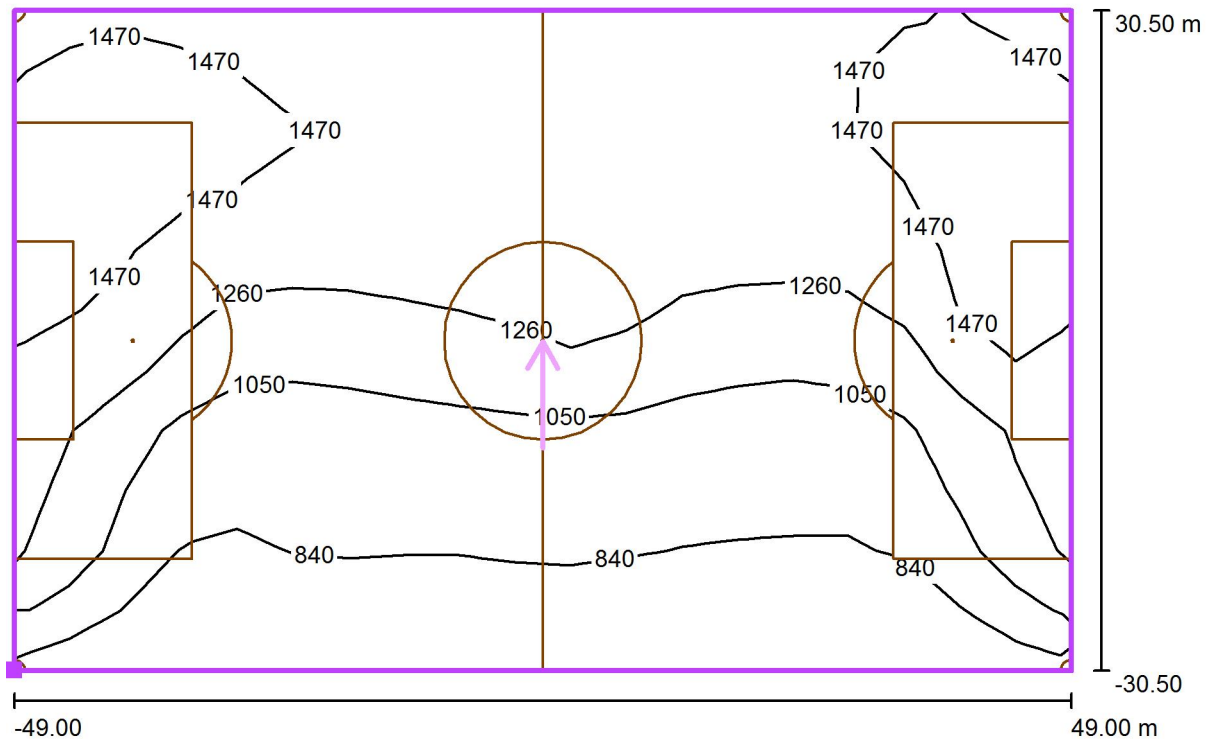
$u_0$   
0.70

$E_{min} / E_{max}$   
0.52

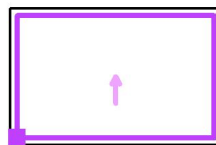


Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Isolines (E, Vertical, Perpendicular to sideline 1)



Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1193

$E_{min}$  [lx]  
652

$E_{max}$  [lx]  
1682

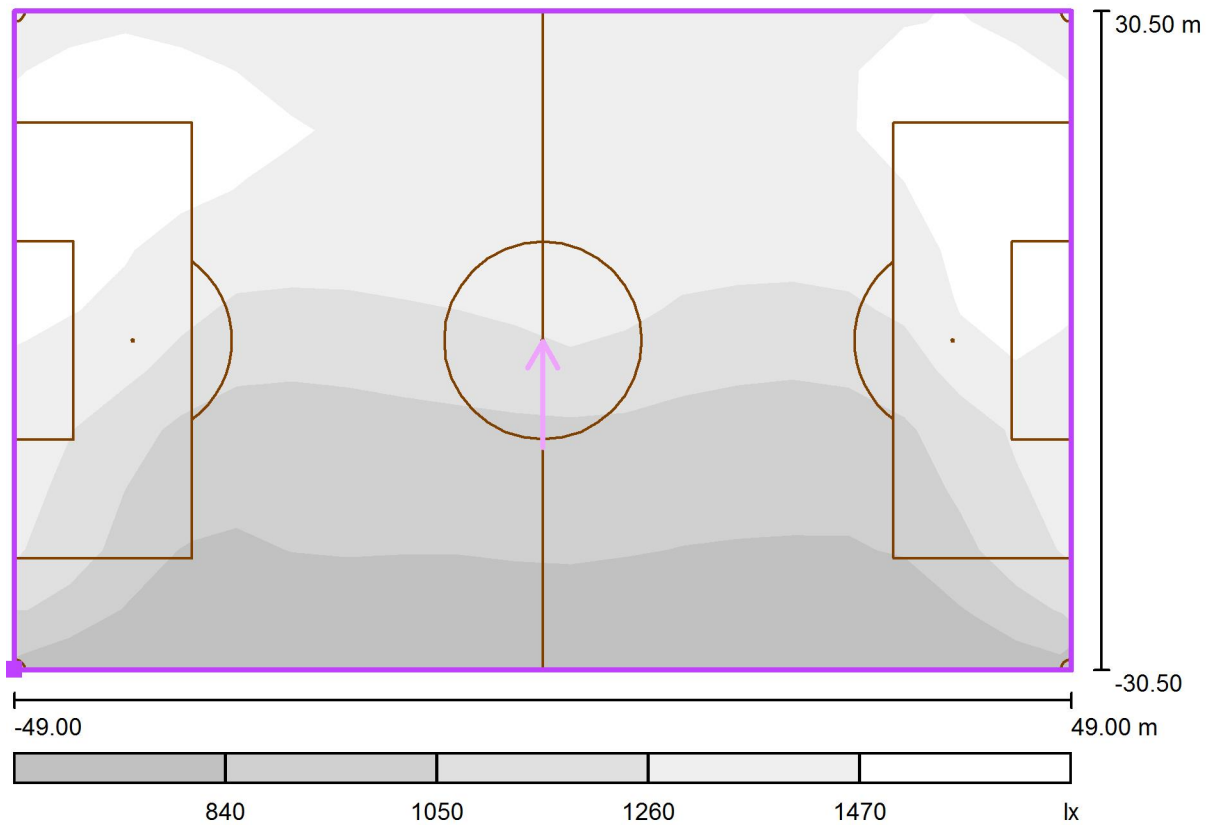
$u_0$   
0.55

$E_{min} / E_{max}$   
0.39



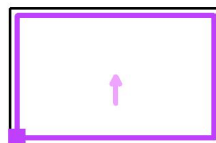
Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Greyscale (E, Vertical, Perpendicular to sideline 1)



Scale 1 : 701

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1193

$E_{min}$  [lx]  
652

$E_{max}$  [lx]  
1682

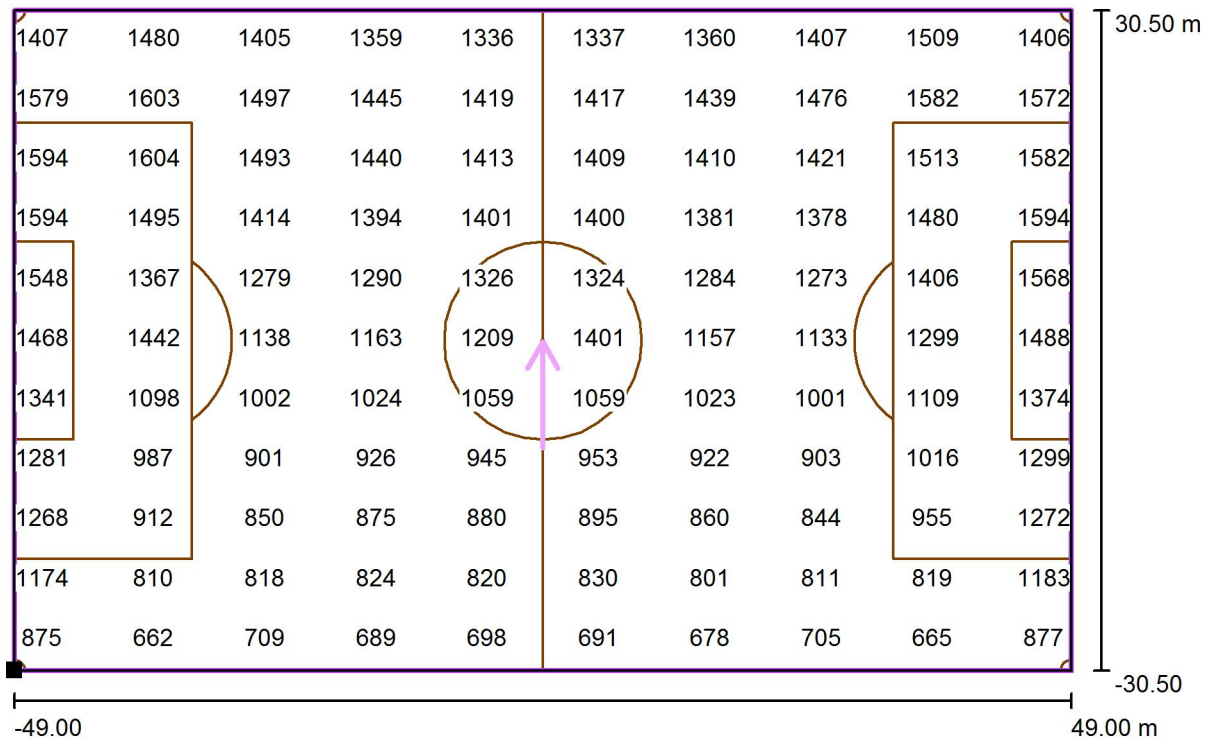
$u_0$   
0.55

$E_{min} / E_{max}$   
0.39



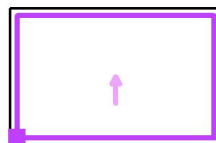
Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Value Graphics (E, Vertical, Perpendicular to sideline 1)



Not all calculated values could be displayed.

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m, 0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1193

$E_{min}$  [lx]  
652

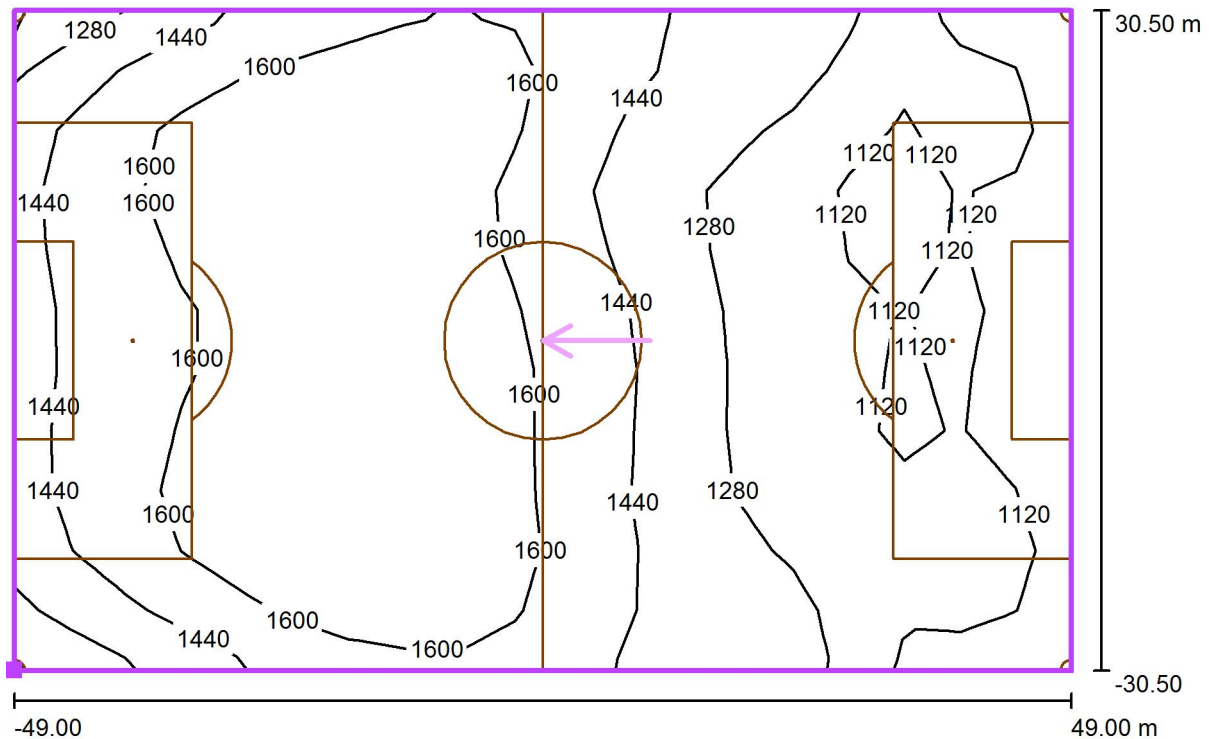
$E_{max}$  [lx]  
1682

$u_0$   
0.55

$E_{min} / E_{max}$   
0.39

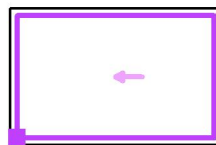
Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Isolines (E, Vertical, Perpendicular to sideline 2)



Values in Lux, Scale 1 : 701

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1426

$E_{min}$  [lx]  
1000

$E_{max}$  [lx]  
1764

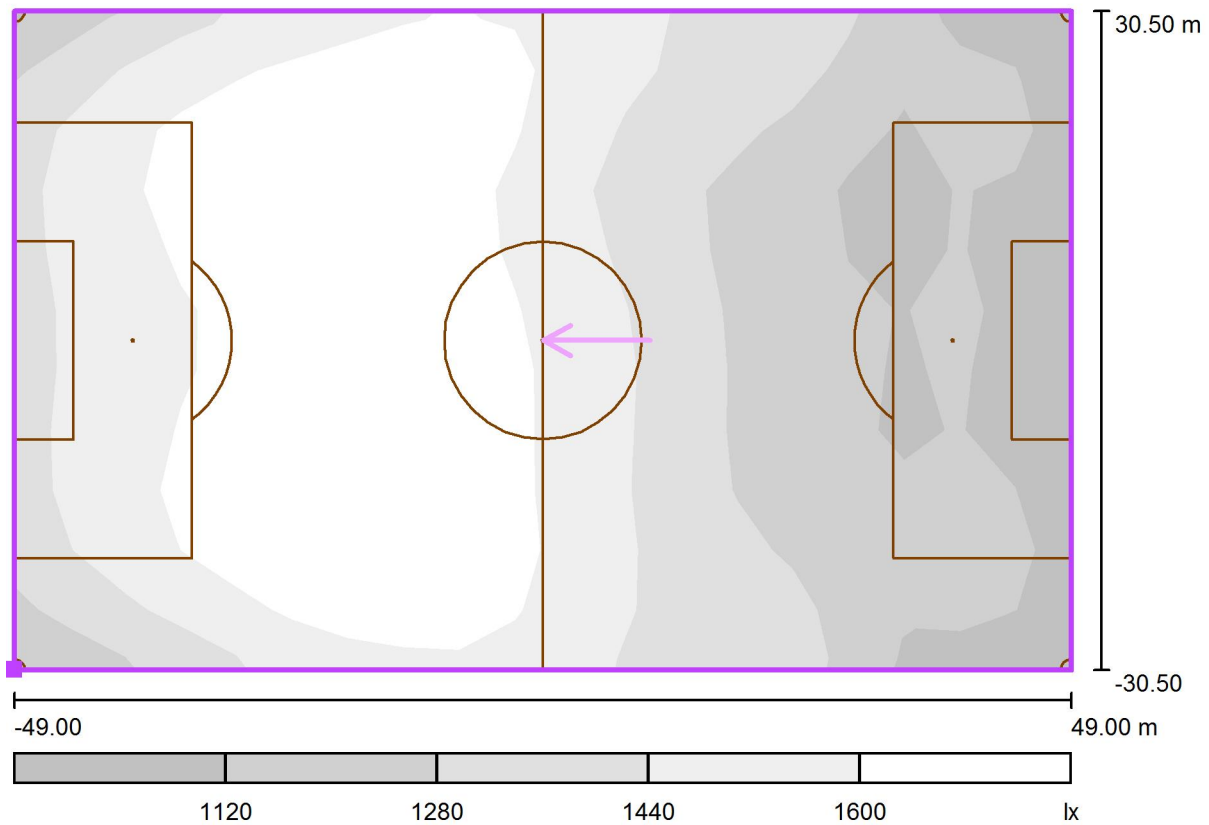
$u_0$   
0.70

$E_{min} / E_{max}$   
0.57



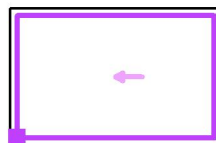
Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Greyscale (E, Vertical, Perpendicular to sideline 2)



Scale 1 : 701

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1426

$E_{min}$  [lx]  
1000

$E_{max}$  [lx]  
1764

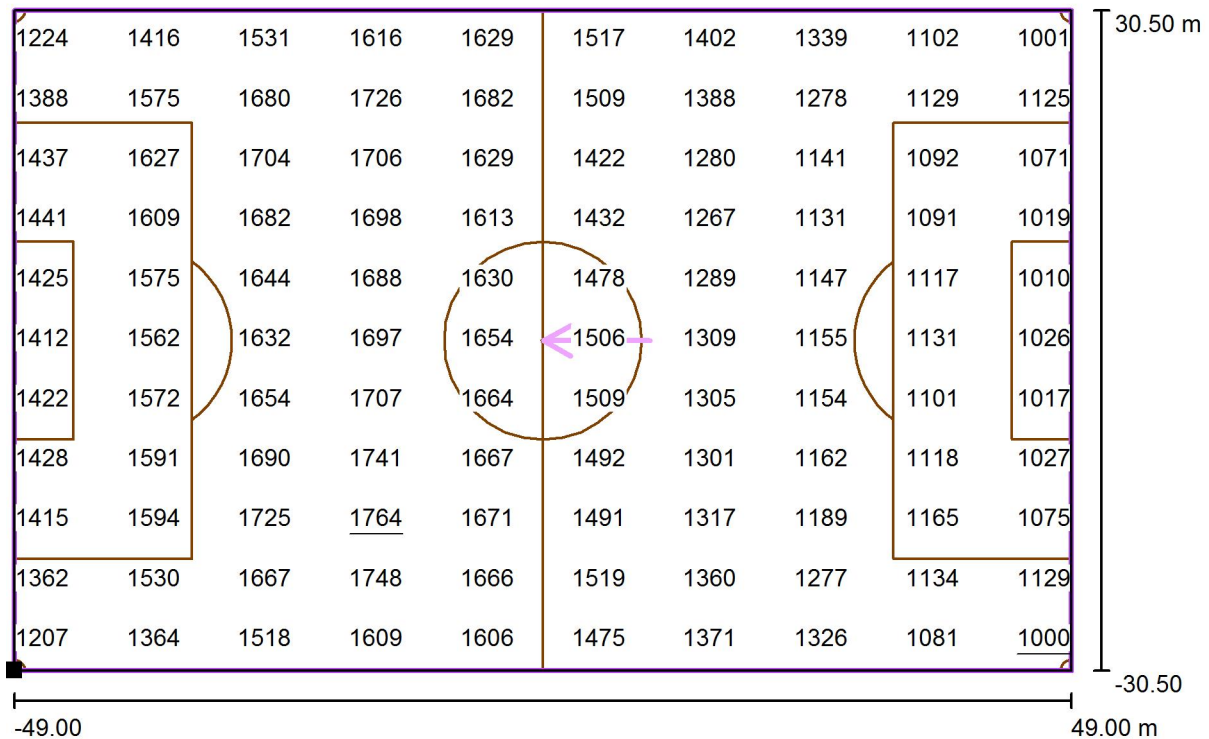
$u_0$   
0.70

$E_{min} / E_{max}$   
0.57



Operator  
Telephone  
Fax  
e-Mail

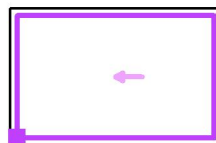
## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Value Graphics (E, Vertical, Perpendicular to sideline 2)



Values in Lux, Scale 1 : 701

Not all calculated values could be displayed.

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1426

$E_{min}$  [lx]  
1000

$E_{max}$  [lx]  
1764

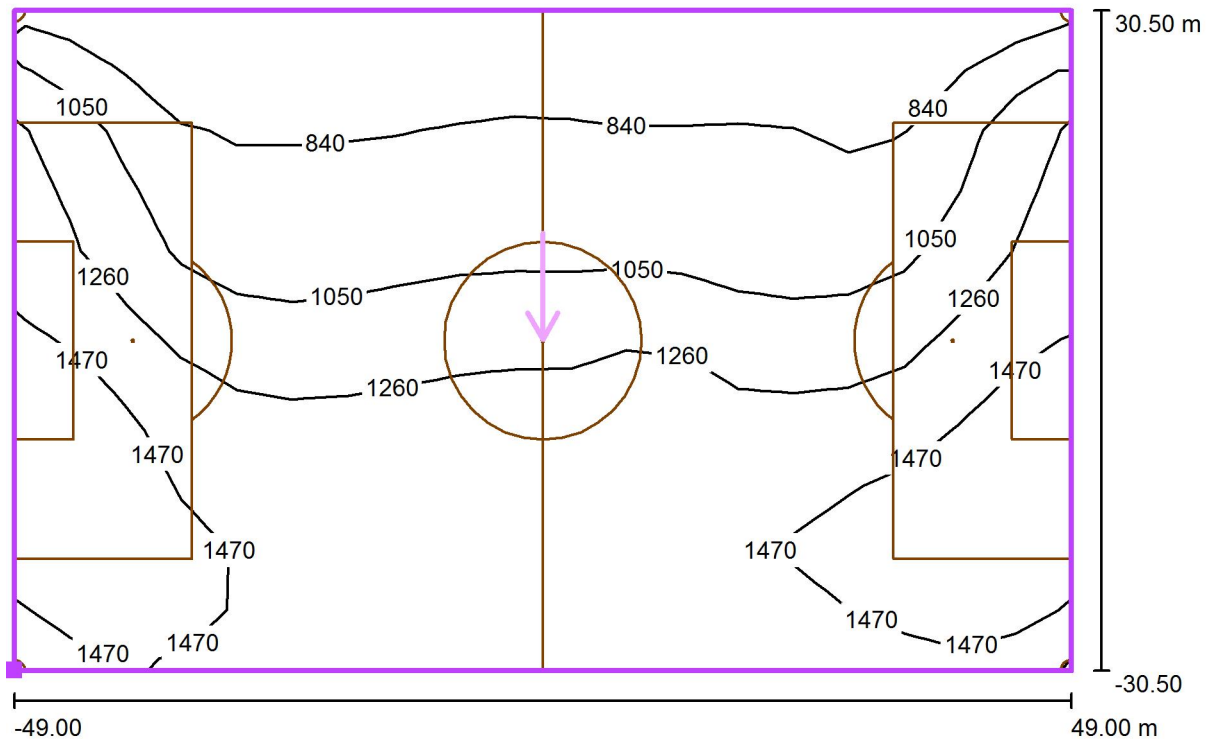
$u_0$   
0.70

$E_{min} / E_{max}$   
0.57



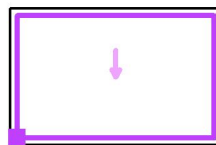
Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Isolines (E, Vertical, Perpendicular to sideline 3)



Values in Lux, Scale 1 : 701

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1190

$E_{min}$  [lx]  
652

$E_{max}$  [lx]  
1682

$u_0$   
0.55

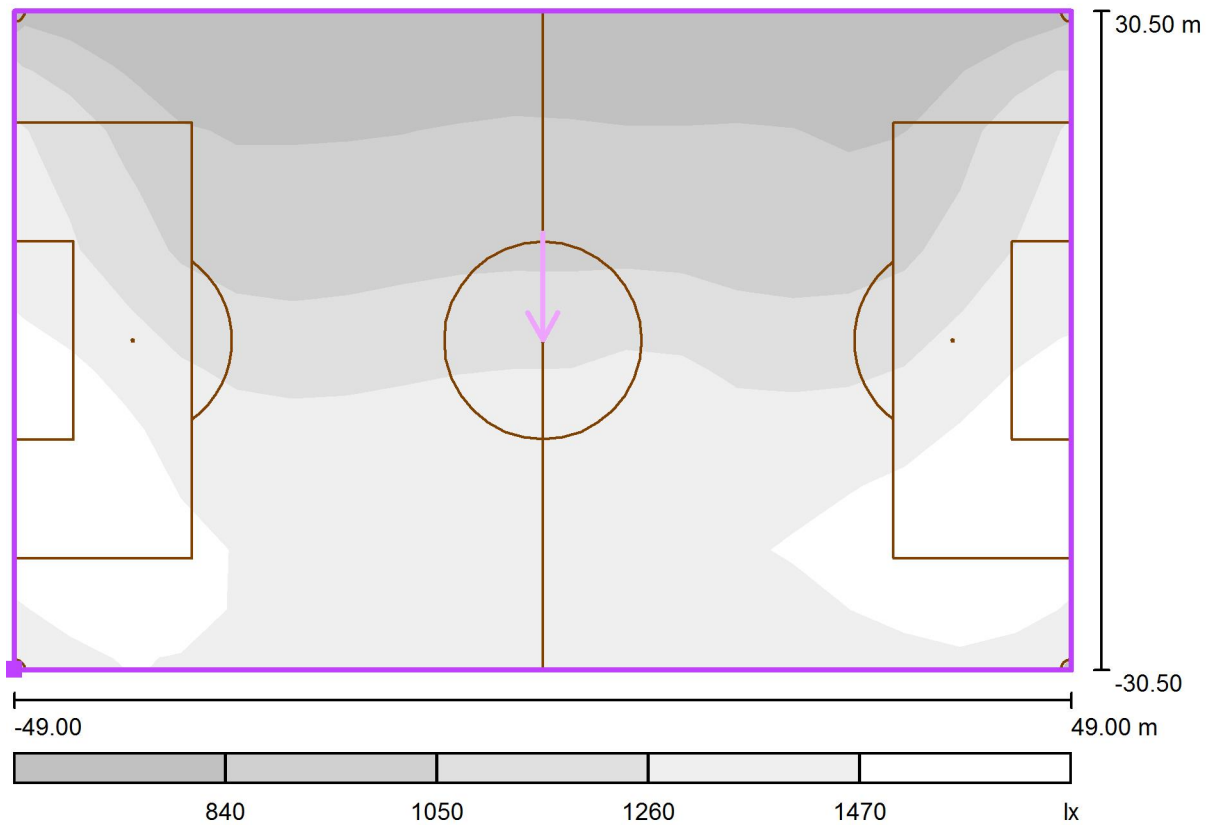
$E_{min} / E_{max}$   
0.39





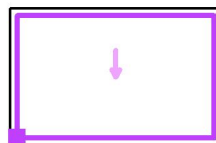
Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Greyscale (E, Vertical, Perpendicular to sideline 3)



Scale 1 : 701

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1190

$E_{min}$  [lx]  
652

$E_{max}$  [lx]  
1682

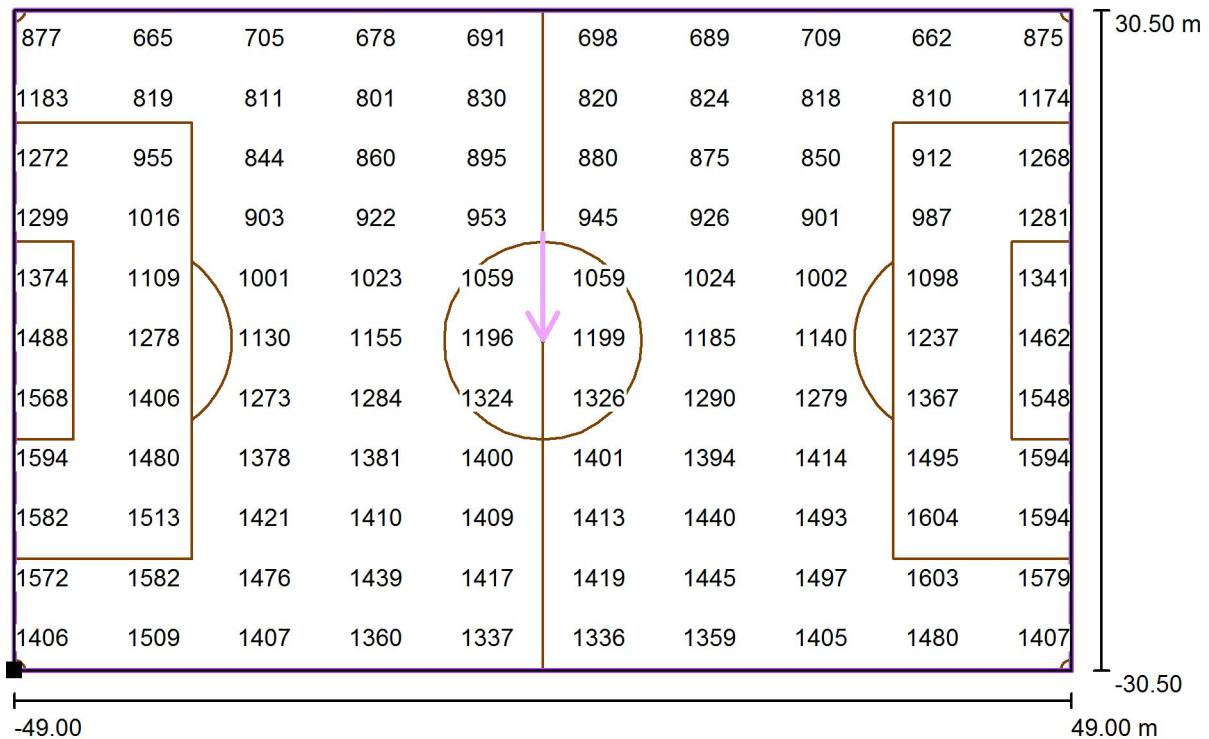
$u_0$   
0.55

$E_{min} / E_{max}$   
0.39



Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Value Graphics (E, Vertical, Perpendicular to sideline 3)

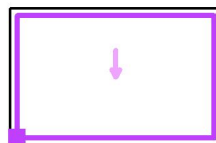


Values in Lux, Scale 1 : 701

Not all calculated values could be displayed.

Position of surface in external scene:

Marked point: (3.500 m, 3.500 m, 0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1190

$E_{min}$  [lx]  
652

$E_{max}$  [lx]  
1682

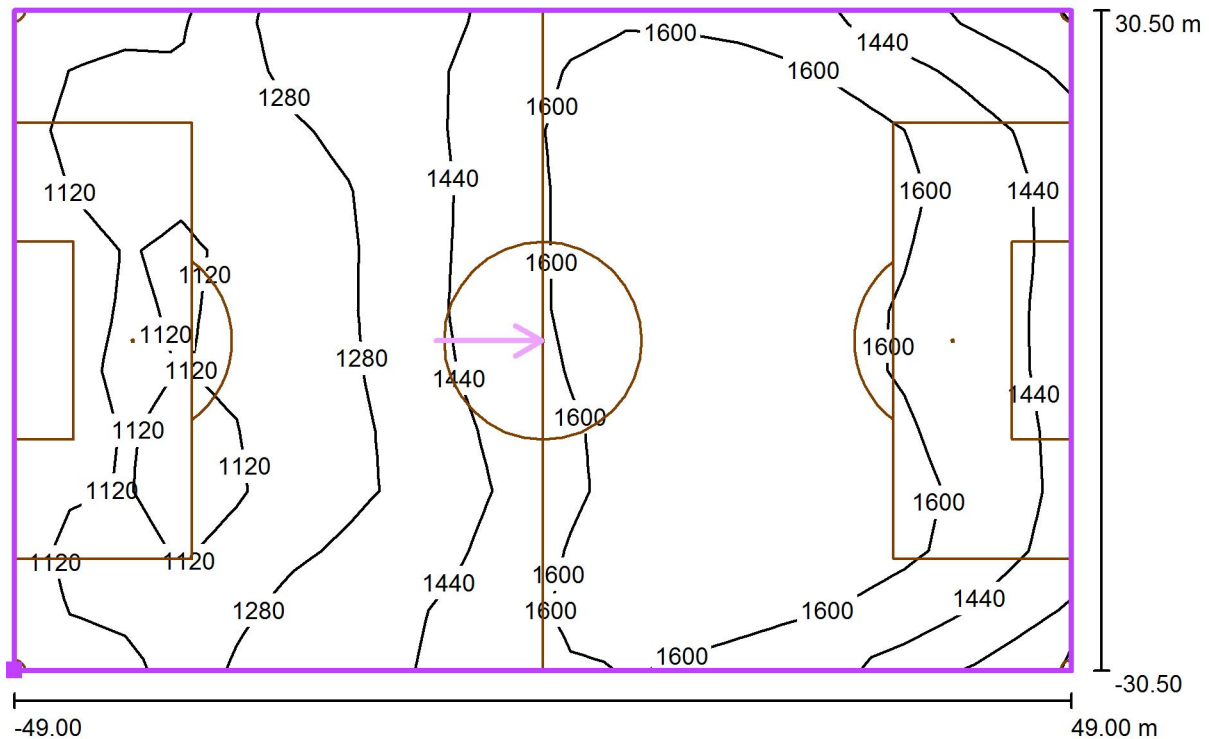
$u_0$   
0.55

$E_{min} / E_{max}$   
0.39



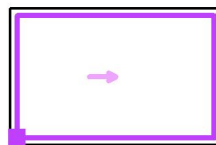
Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Isolines (E, Vertical, Perpendicular to sideline 4)



Values in Lux, Scale 1 : 701

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1426

$E_{min}$  [lx]  
1000

$E_{max}$  [lx]  
1764

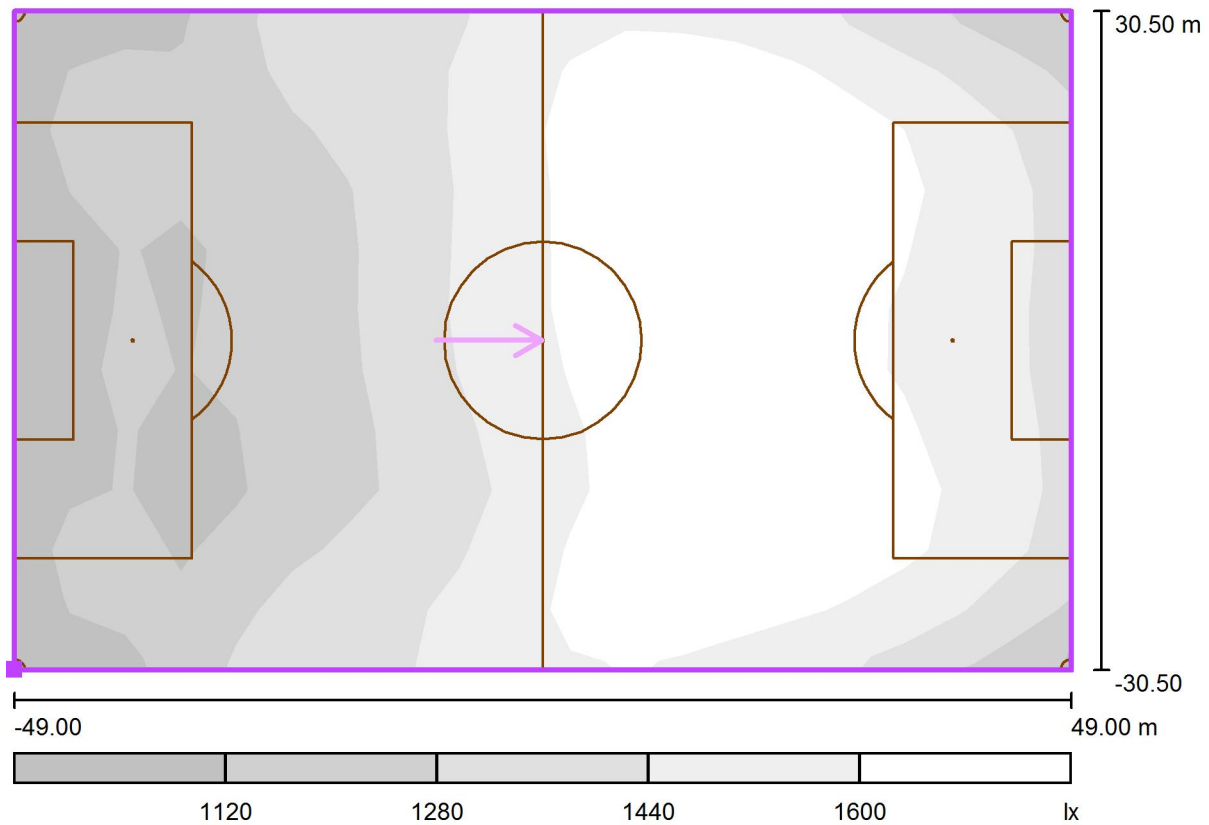
$u_0$   
0.70

$E_{min} / E_{max}$   
0.57



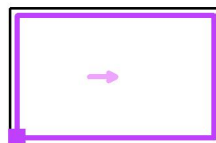
Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Greyscale (E, Vertical, Perpendicular to sideline 4)



Scale 1 : 701

Position of surface in external scene:  
Marked point: (3.500 m, 3.500 m,  
0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1426

$E_{min}$  [lx]  
1000

$E_{max}$  [lx]  
1764

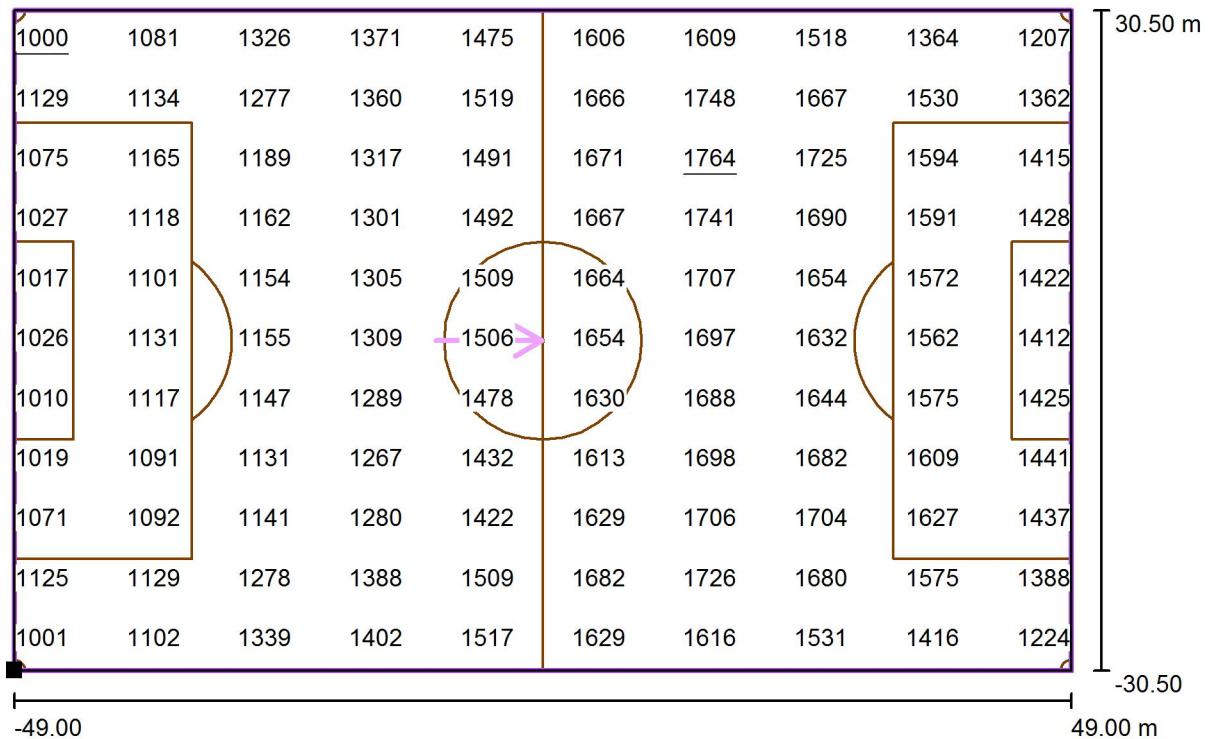
$u_0$   
0.70

$E_{min} / E_{max}$   
0.57



Operator  
Telephone  
Fax  
e-Mail

## Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Value Graphics (E, Vertical, Perpendicular to sideline 4)

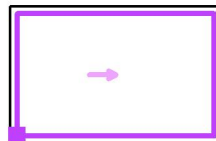


Values in Lux, Scale 1 : 701

Not all calculated values could be displayed.

Position of surface in external scene:

Marked point: (3.500 m, 3.500 m, 0.000 m)



Grid: 19 x 11 Points

$E_{av}$  [lx]  
1426

$E_{min}$  [lx]  
1000

$E_{max}$  [lx]  
1764

$u_0$   
0.70

$E_{min} / E_{max}$   
0.57